

Lady Oxford, daughter of Royal Lady, by Enterprise (imp.), is also a grand one, that may prove a strong competitor, although the matronly character of the mother will doubtless carry many points in her favor. A sister of the boar Regalia, of the same farrow, that rejoices in the name of Bubble, looks, just now, like a heavy weight competitor for the honors in the yearling class. There are plenty more of good ones which we must of necessity pass by, but they will be worth looking up at the next autumn shows, or at home by those visiting the herd.

Cotswolds are also in a flourishing condition, and look as though they were in preparation for the coming campaign. Some forty shearling rams have been wintered and are now awaiting customers, while the lamb crop comes to hand in good shape and is progressing favorably.

A neat, good Jersey herd, that are contributing a goodly supply of gilt-edged butter for Toronto customers, look like business. These consist, chiefly, of Jersey Cattle Club cows and heifers of popular strains, in which may be found cows in milk and heifers in calf, by such sires as Mighty Dollar and Jackson's Dollar, both highly bred in producing lines and popular strains.

#### Mr. John Pulfer's Jerseys.

The farmers in the vicinity of Brampton have learned to prize the little butter cow, as the Jersey is familiarly styled. For this two reasons may be ascribed. First, Brampton's close proximity to Toronto market insures a paying demand for good butter, and, secondly, Jerseys were sufficiently early introduced to prove their superiority for this class of dairy work. Among those who early found the profitability of Jerseys was Mr. John Pulfer, who has kept a nice herd for many years, although he complains that buyers will come and persuade him to part with those he feels that he ought to keep. His present stock bull is Yankee Pogue, by that highly-bred St. Lambert bull, One Hundred Per Cent., while his dam is Yankee's Dream. This bull has every appearance of getting performers himself, and his high-class parentage insures it.

Mr. Pulfer has some choice heifers by the King of Peal, a bull which he contends did him great service. He has a lot of handsome Jersey Cattle Club cows and heifers in milk worth looking up, also a few not registered which he keeps on hand for sale.

#### Pleasant View Tamworths.

There is probably no county in Ontario where a more systematic plan of winter-feeding swine is practised than in Waterloo. For this purpose pigs must be easy and quick feeders, or they will not pay for the food consumed, neither will fall pigs attain weight or finish to insure a sale before the busy work on the farm commences in the spring. It will be seen how necessary it is for those engaged in this work to be able to procure such pigs as suit the requirements of this trade.

For this purpose crosses are much in demand, and the Tamworth and Berkshire cross have found many advocates as filling the bill for this kind of hog, and this fact has induced many farmers in that locality to breed purebred Tamworths. Among these is Mr. E. H. Kolb, whose farm is intersected by the Grand Trunk Railway a short distance east of Berlin. Mr. Kolb now has a good-sized herd of this breed, with the imported boar Br. W.ingham Hero, bred by Mr. John Newman, Cliff House, at the head of the herd. The sows are chiefly of the breeding of Mr. John Bell, Amber, and Caldwell Bros., Orchardville. From the latter herd the sow Br. W. Blanks Lucy, by Roland, was procured, and a useful sow she is, that has bred a good many younger sows that have been retained in the herd. Altogether, several brood sows are kept, and it is Mr. Kolb's aim to have younger sows ready for mating also on hand to supply customers with such material as they may require in this line.

#### Mr. Gibson's Jersey Sale.

The offering of Mr. Richard Gibson's small but choice herd of Jersey cattle did not attract as large a company of buyers as might have been expected. Eight animals had been catalogued, but only four found purchasers, as follows: Ballony, dropped July, 1888, Bruce Cornell, Delaware, \$47; Belvoir Pet, dropped March, 1889, Capt. Rolph, Markham, \$300; Pink Fleur de Lis, dropped August, 1893, Charles Egan, Petrolia, \$64; Agnes of Glen Duart, dropped January, 1892, A. T. McCartney, Dunnville, \$122.

#### Messrs. A. Telfer & Sons' Southdowns.

A short drive from Paris brought us to the farm of Messrs. A. Telfer & Sons, who generally forward a neat flock of Southdowns to the leading exhibitions. Since our last visit several important additions have been made which should assist in building up the flock. A ram from the celebrated flock of Mr. Henry Webb, of Abraham, has done good service, which one would expect, for he is a sheep of the proper type himself. There is also another imported ram from the Ellis flock that has left some nice things in the flock. He is of slightly different type, and suits part of the flock nicely.

The ewes have been chiefly selected from such flocks as Messrs. Coleman, Ellis, and George Jonas,

and a neat, good lot of shearing rams and ewes they have bred, while this year's crop of lambs are exceedingly promising.

## Veterinary.

### Joint Disease of Foals and Other Young Animals.

By PROF. PENNIEKTH, in the Journal of the Royal Agricultural Society of England.

(Continued.)

On post mortem examination there is generally discovered evidence of the disease having resulted from affection of the navel. Though usually open, this may be found healed up on the outside. On the inside, the vessels frequently contain very dark blood, and unhealthy, sometimes putrid, matter, and about the end of the cord abscesses may have formed. In calves and lambs, most commonly through the veins, and, in foals, through the arteries, the germs have been distributed to various parts of the body, and, becoming arrested in some, set up inflammation and formation of matter there. In all very young animals, the joints would appear particularly favorable to these processes, and in animals dead of this affection are found, in and about the joint sacs, collections of matter, and evidence of destruction of essential parts of the joints—the lining membrane which secretes the "joint oils," the cartilage covering the ends of the bone, and the bone itself. Sometimes the quantity of matter is very great, and, bursting through the structures enclosing the joints, finds its way into the sheaths of the tendons, etc. Any part of the body may give evidence of a similar process; the lungs, the chest cavity, the liver, kidneys, the glands, the cavity of the abdomen, and the brain are common seats of abscesses.

The treatment of contagious disease involves the consideration of curative and preventive measures. Clinical experience and the nature of this affection tell us that curative treatment is not hopeful. After entrance of the poison into the system, despite the adoption of all known agencies, a large proportion of the affected will die (of lambs and foals probably more than 60 per cent.); while of those which survive many will only drag on an unprofitable existence. Treatment of such entails much trouble and expense, and rearing is rarely economical. If the subject be a lamb or calf, the constitution is usually so affected that only a poor specimen is produced; if a foal, in addition to the foregoing, the permanent damage to the joints often so interferes with movement as to render the animal unsightly and useless for life. A very small proportion, however, get the disease in a mild form, and make a tolerably satisfactory recovery. In the case of foals, it will be advisable to engage the services of a veterinary surgeon, for each individual case will call for treatment special to its circumstances. Occasionally, an unhealthy condition of the cord or navel and a collection of matter there may be discovered before the germs have become distributed through the system, when local treatment by removing diseased parts and killing the germs may avert further mischief. It may also happen that the secondary swellings are in a non-essential part accessible to the knife, when opening of the abscess, discharge of its contents, and disinfection of its cavity, associated with attention to the navel, may be followed by good recovery. This treatment, of course, calls for all the skill of the expert, and even with it such successful issue is not common. Once the morbid condition is thoroughly established in the body cure is not likely to be effected, while in most

of those cases in which the active process is overcome the subject remains an unsatisfactory animal, coming within the category of "piners."

Our preventive measures should commence by the adoption of any means at our disposal for avoiding the introduction of the germs into our studs or farms. Animals should not be carelessly brought into the valuable stud, flock, or herd from a place known to be affected with the disease, or without some kind of assurance as to their health and freedom from the power to infect. The production of an offspring healthy at birth is always a matter of importance, irrespective of this affection, but realization of the fact that want of developmental power on the part of the newly-born animal retards the proper closing of the navel, and that this is the common port of entrance of the virus, suggests that, in view of the disease, some additional importance attaches to the avoidance of conditions which interfere with the vital activities of the fetus before birth, and its retention in the womb during the full time proper to its species. The health of pregnant animals entails proper food, regular feeding, exercise, and sanitary surroundings, and the retention of the fetus demands the avoidance of all excitement and of communication with aborting animals. Inasmuch as neglect of any of these matters may result in the production of an offspring more than ordinarily susceptible to joint disease they should not be disregarded, but that they are not of the highest importance appears evident from the fact that the disease is most common and most troublesome when these best sanitary conditions are believed to be most closely observed. They suggest links for the chain of preventive measures, but should not divert attention from the immediate cause of the contagium, which, in spite of their adoption, will, in many cases, force an entrance and establish the disease.

In principle there should be no difference, but as ewes are dealt with in flocks, and mares and cows individually, it may be desirable to refer to the means of prevention separately. On the first appearance of the malady in a flock, even if only one lamb be affected, it, with the ewe, should be immediately isolated, and all pregnant ewes, and ewes and lambs, which have been in the same fold or place, should be, where practicable, removed from the situation and maintained separate from the in-lamb ewes which have not been in the infected fold or pasture. The navels of all lambs should be washed in some disinfectant solution. Straw, manure, and other matters in the affected fold should be disinfected, and a fresh lambing fold selected as far as possible from the first. The shepherd and everything used by him in connection with lambing should be carefully disinfected. After this, it may be advisable that he should confine his attention to the affected part of the flock, while a fresh man, who has not been in contact with the diseased lambs, is told off to the remainder.

Fortunately for the carrying out of these measures, joint disease often makes its appearance in the earlier born lambs. When strict attention is paid to them, the spread is quickly arrested and much loss averted. With the idea that the disease in lambs depended on insufficiency of lime salts in the food of the ewe, amongst other preventive means heavy top dressings of lime have been made, and in some cases in the following season the flock has been free from the disease. It cannot be admitted that absence of lime may lead to the development of the disease, but it is quite con-

ceivable that heavy dressings of it may prove deleterious to germs distributed by affected lambs, and thus prove a useful measure.

The smaller number and greater individual value of foals admit of the expenditure of more attention on individuals, and without a proper appreciation of, and allowance for, this disease, the greater the care the more favorable the circumstances for its spread. Joint disease usually occurs amongst foals whose dams have been stabled, and rarely amongst those born and remaining in the fields. In view of preventing the malady, it cannot be deemed good practice to keep one box specially for foaling all mares. For if, by accident, the box become contaminated, every subsequent occupant will be liable to infection. If possible, mares should be placed for foaling in thoroughly disinfected, separated boxes, in which it is arranged for them to remain with their foals some considerable time. When this is not possible, after each parturition the foaling-shed should be cleansed and disinfected, the manure and straw removed, the drains flushed with disinfectant, and fresh bedding supplied. If the disease has existed on the place, it will be well to sponge the passages of mares before parturition with a tepid, harmless, disinfectant solution, and it is essential that the attendant at the foaling and all matters which may be used in connection with the act be clean and free from infection. Immediately the foal is born, after having washed the cord and navel in an antiseptic solution, the veterinary surgeon, or some one acting under his instructions, should tie the end of the cord with an aseptic ligature. When this is done, a non-irritating disinfectant powder may with advantage be dusted on, and the navel sopped daily in a disinfectant solution, afterwards being dusted with the powder. The details of this treatment are for the consideration of the person attending the case. The tying of the cord after birth has been adopted with much apparent success in different studs in which this affection formerly caused much trouble. It is a simple operation which appears to have much to recommend its general adoption, even when there is no specially appreciable risk of infection with the virus of joint disease.

On the first sign of a foal being affected, it should, with the mare, be isolated, and attended by a groom prohibited from coming in contact with other mares and foals and in-foal mares. The box, manure, etc., should at once be disinfected. The carcasses of the diseased should be disposed of without delay, in accordance with these principles. Unnecessary handling of foals and mares before and after foaling should be avoided. Though we have not evidence sufficient to admit of the assumption that the exciting cause of abortion in mares is identical with that of joint disease, our experience leads us to suggest that mares which have aborted, whether their offspring be born living or dead, should be regarded with a degree of suspicion, and removed from the healthy, whilst their genital organs and any discharges—and, if the foal lives, the udder—should be subjected to disinfection. In situations where "joint disease" has existed, after the foaling season, all contaminated places should be, as far as possible, purified by repeated cleansings and disinfecting, a consideration for attendants on parturient mares and foals, as well as materials used about them season after season not being omitted.

The foregoing measures apply equally to the prevention of joint-ill in calves, among which it is not so often met with.